## Effect of Purple Sweet Potato Flour on Triglyceride Levels of Male White Rats Wistar Strain Obesity Model

Kummala Nuzulul Fajri Program Studi Gizi Klinik Jurusan Kesehatan

## ABSTRACT

*Obesity is a nutritional problem where there is a buildup of body fat that is in excess* of what is needed and as a risk factor for increasing triglyceride levels in the blood. One alternative that can reduce triglyceride levels is food containing anthocyanins, namely purple sweet potato flour. Anthocyanins can play a role in fighting free radicals by inhibiting cholesterol synthesis, ending with an increase in fatty acid oxidation and a decrease in fatty acid synthesis. The aim of the study was to determine the effect of purple sweet potato flour on triglyceride levels in obese white rats (Rattus novergicus l.) wistar strain. This type of research is true experimental with pretest – posttest with control group design. This study used 24 male wistar rats weighing between 200-300 grams aged 2-3 months. Rats were divided into 2 control groups and 1 treatment group which were given purple sweet potato flour at a dose of 3.89 grams/day which was administered twice a day by sonde for 6 days. Triglyceride levels were checked using the GPO-PAP reagent method. Data analysis by Paired T-Test test, followed by One Way Anova test followed by Wilcoxon test. The conclusion of this study was that purple sweet potato flour tended to decrease but had no significant effect on reducing serum triglyceride levels in wistar rats in the treatment group (P) (p=0.221). In this study the rats used in the rat state were still not obese, this was due to the low consumption of high-fat diet feed and the occurrence of leakage in the fructose bottle.

Keywords: Purple Sweet Potato Flour, Triglyceride levels, Obesity.